

INTERNATIONAL SEARCH REPORT

International application No.

PCT/AU2003/001144

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|---|--|--|--|---|---|---|---|--|--|---|--|--|
| A. CLASSIFICATION OF SUBJECT MATTER | | | | | | | | | | | | |
| Int. Cl. ⁷ : F01D 1/08, 25/00; H02P 9/14; H02K 17/42; F25B 11/02; F25B 1/04, 1/053 | | | | | | | | | | | | |
| According to International Patent Classification (IPC) or to both national classification and IPC | | | | | | | | | | | | |
| B. FIELDS SEARCHED | | | | | | | | | | | | |
| Minimum documentation searched (classification system followed by classification symbols) See the Supplemental Box II | | | | | | | | | | | | |
| Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched | | | | | | | | | | | | |
| Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) See the Supplemental Box II | | | | | | | | | | | | |
| C. DOCUMENTS CONSIDERED TO BE RELEVANT | | | | | | | | | | | | |
| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. | | | | | | | | | | |
| X | US 4641498A (MARKOVITCH et al.) 10 February 1987 The whole document, especially column 4, lines 44-46 | 1-15 | | | | | | | | | | |
| X | US 5996347A (NAGAE et al.) 7 December 1999 The whole document | 1-15 | | | | | | | | | | |
| X | EP 0136858A1 (HOLSET ENGINEERING COMPNAY LIMITED.) 10 April 1985 The whole document | 1-15 | | | | | | | | | | |
| <input checked="" type="checkbox"/> Further documents are listed in the continuation of Box C <input checked="" type="checkbox"/> See patent family annex | | | | | | | | | | | | |
| <p>* Special categories of cited documents:</p> <table border="0"> <tr> <td>"A" document defining the general state of the art which is not considered to be of particular relevance</td> <td>"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</td> </tr> <tr> <td>"E" earlier application or patent but published on or after the international filing date</td> <td>"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone;</td> </tr> <tr> <td>"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</td> <td>"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art</td> </tr> <tr> <td>"O" document referring to an oral disclosure, use, exhibition or other means</td> <td>"&" document member of the same patent family</td> </tr> <tr> <td>"P" document published prior to the international filing date but later than the priority date claimed</td> <td></td> </tr> </table> | | | "A" document defining the general state of the art which is not considered to be of particular relevance | "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention | "E" earlier application or patent but published on or after the international filing date | "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone; | "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) | "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art | "O" document referring to an oral disclosure, use, exhibition or other means | "&" document member of the same patent family | "P" document published prior to the international filing date but later than the priority date claimed | |
| "A" document defining the general state of the art which is not considered to be of particular relevance | "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention | | | | | | | | | | | |
| "E" earlier application or patent but published on or after the international filing date | "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone; | | | | | | | | | | | |
| "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) | "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art | | | | | | | | | | | |
| "O" document referring to an oral disclosure, use, exhibition or other means | "&" document member of the same patent family | | | | | | | | | | | |
| "P" document published prior to the international filing date but later than the priority date claimed | | | | | | | | | | | | |
| Date of the actual completion of the international search 14 January 2004 | | Date of mailing of the international search report 22 JAN 2004 | | | | | | | | | | |
| Name and mailing address of the ISA/AU AUSTRALIAN PATENT OFFICE PO BOX 200, WODEN ACT 2606, AUSTRALIA E-mail address: pct@ipaustalia.gov.au Facsimile No. (02) 6285 3929 | | Authorized officer ASANKA PERERA Telephone No : (02) 6283 2373 | | | | | | | | | | |

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| C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT | | |
|---|---|-----------------------|
| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
| X | FR 2266799A1 (TROESTER) 31 October 1975 The whole document | 1-15 |
| X | US 5798632A (MULJADI) 25 August 1998 The whole document | 16-20, 34 |
| Y | US 5864198A (PINKERTON) 26 January 1999 Figure 1, column 4, line 22-column 5, line 39 | 16-20, 34 |
| Y | Derwent Abstract Accession No. 98-224193/20, Class X 13, JP 10-066398A (FUJI ELECTRIC CO LTD) 6 March 1998 Abstract | 16-20, 34 |
| Y | FR 2475313A1 (ELECTRICITE DE FRANCE) 7 August 1981 Figure 1 and accompanying description <i>Note: US 5864198A could be combined with either one of the JP 10-066398A or FR 2475313A1 for testing the inventive step of claims 16-34</i> | 16-20, 34 |
| X | US 4229689A (NICKOLADZE) 21 October 1980 The whole document | 16-18 |
| A | EP 0399146A1 (GENERAL ELECTRIC COMPANY) 28 November 1990 The whole document | 16-18 |
| A | WO 00/61997A1 (ARMINES) 19 October 2000 Figure 2a and accompanying description | 21-25 |
| A | EP 0010210B1 (CARRIER CORPORATION) 23 June 1982 The whole document | 21-25 |
| A | WO 00/71944A1 (THERMAL ENERGY ACCUMULATION PRODUCTS PTY LTD) 30 November 2000 Abstract and figure | 21-25 |
| X | GB 2287783A (HITACHI LTD) 27 September 1995 The whole document | 26-33 |
| X | EP 0725255A2 (HITACHI LTD) 7 August 1996 The whole document | 26-33 |

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| C (Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT | | |
|--|---|-----------------------|
| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
| X | Derwent Abstract Accession No. 2002-475690/51, Class Q74; X27 JP 2002-130770A (MITSUBISHI ELECTRIC CORP) 9 May 2002 Abstract and figure | 26-33 |
| X | Derwent Abstract Accession No. 97-406232/38, Class X27 JP 09-178322A (MATSUSHITA REIKI KK) 11 July 1997 Abstract and figure | 26-33 |

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Box I Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos :
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos :
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
3. ☐ Claims Nos :
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a)

Box II Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

See the Supplemental Box I

1. ☒ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☒ No protest accompanied the payment of additional search fees.

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